

## ABSTRACT

5 An isolated protein sequence or peptide from the E2, E6 or E7 early coding region  
of human papillomavirus (HPV) that is soluble in an aqueous medium, and characterized by  
a relative paucity of tryptophan, methionine and cysteine residues, and a relative abundance  
of glycine and asparagine residues. Also disclosed are isolated protein sequences or peptides  
from the E2, E6 or E7 early coding regions of HPV 16 and 18 and methodologies for  
detecting or diagnosing cancer or cellular abnormalities. Detection or diagnosis of Cancer  
or cellular abnormalities may include detecting or diagnosing pre-cancerous or pre-malignant  
10 conditions, cervical dysplasia, cervical carcinoma, koilocytosis, hyperkeratosis,  
intraepithelial lesions, and other cancers. A methodology for detecting or diagnosing cancer  
or cellular abnormalities comprises the steps of (1) reacting a sample of body fluid or tissue  
with isolated protein sequences or peptides; (2) forming an antibody-peptide complex; and  
(3) detecting the antibody-peptide complex.

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